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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,933	10/16/2003	John Gavin MacDonald	KCX-665 (19232)	4589
22827 7590 06/25/2007 DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			EXAMINER SILVERMAN, ERIC E	
			ART UNIT 1615	PAPER NUMBER
			MAIL DATE 06/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/686,933

Applicant(s)

MACDONALD ET AL.

Examiner

Eric E. Silverman, PhD

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31 and 35-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31 and 35-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicants' submission filed 5/29/2007 has been received. Claims 31 and 35 – 52 are pending pursuant to amendment.

Claim Objections

Claim 49 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Independent claim 31 requires that the particles be silica particles. Claim 49, which merely requires that the particles be "formed primarily from silica" is in effect a repetition of the limitation of claim 31, and thus does not further limit the parent claim.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 31, 38 and 43 – 47 **remain** provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 40, 41, 47 – 53 of copending Application No. 10/686,938 for reasons of record.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicants' have agreed that a terminal disclaimer will be filed if needed when the claims are otherwise in condition for allowance. Until receipt of an acceptable terminal disclaimer, this rejection must be maintained.

Claims 31, 43, 49, and 50 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 35 of U.S. Patent No. 7,141,518. Although the conflicting claims are not identical, they are not patentably distinct from each other because while copending claim 1 does not require the particles comprise silica, this is recited by copending claim 9. The article comprising the particles in instant claims is read on by the protective barrier clothing of copending claim 35. Instant claims do not have the zeta potential requirements of copending claims, nor are metals required in instant claims. In this respect, copending claims are a species of instant genus claims, thus rendering instant claims obvious in their entirety.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The rejection of claim 38 under 35 U.S.C. 112, second paragraph, is **withdrawn** in view of applicants' persuasive arguments. Applicant has defined the term in question in the specification, and as such it is not indefinite.

Claim 49 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim requires nanoparticles "formed primarily from silica". It is not clear how much non-silica may be present in particles to qualify particles as being "primarily from silica". Therefore the artisan would be unable to determine the metes and bounds of the claimed invention.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The rejection of claims 31, 32, 35, 43 and 46 under 35 U.S.C. 102(b) as being anticipated by US 6,361,944 to Mirkin et al. is **withdrawn** in view of amendment.

The rejection of claims 31 – 33, 38 – 40 under 35 U.S.C. 102(a) as being anticipated by US 6,680,279 to Cai et al is **withdrawn** in view of the amendment.

Claims 31, 35 – 42 **remain** rejected under 35 U.S.C. 102(b) as being anticipated by EP 1 186 854 to Honda et al. In addition, new claims **49 and 50** are now included in this rejection.

The limitations of the newly rejected claims can be found in Honda as follows:

- For particles made primarily of silica, see the silicon oxide nanoparticles at paragraphs 15 – 16.

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- With regard to the porosity properties of claim 50, this is understood to be inherent, since the silica nanoparticles of Honda have the same size and pore volume as those of instant claims.

Response to Arguments

Applicants' arguments have been fully considered, but are not persuasive.

Applicants' argue that factors other than the composition, size, and surface area can effect pore volume, and thus it cannot be certain that the pore volume of the reference is the same as that of the claims. This argument fails on two grounds. First, the argument is essentially *ad ignorantium*, and thus fails logically. Second, once the Office has made a determination that a particular feature of a claims is inherent, the burden shifts to applicant to prove by evidence or technical reasoning that the feature in question is not inherent. Absent evidence or technical reasoning, Applicants' argument cannot be persuasive. The guidelines on this matter, as set forth in MPEP 2112, appear in part below.

V. ONCE A REFERENCE TEACHING PRODUCT APPEARING TO BE SUBSTANTIALLY IDENTICAL IS MADE THE BASIS OF A REJECTION, AND THE EXAMINER PRESENTS EVIDENCE OR REASONING TENDING TO SHOW INHERENCY, THE BURDEN SHIFTS TO THE APPLICANT TO SHOW AN UNOBVIOUS DIFFERENCE

"[T]he PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on *prima facie* obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]." The burden of proof is similar to that required with respect to product-by-process claims. *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

Applicants arguments with regard to claim 48 is not well understood, since that claim is not included in this rejection, nor was it included in the rejection over Honda in the previous office action, mailed 2/26/2007.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 43 **remains** rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al for reasons of record and those discussed below.

Response to Arguments

Applicants' arguments have been fully considered, but are not persuasive. Applicants' arguments regarding Honda have been addressed, *supra*.

Claims 44, 45, 46, 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda in view of WO 03/025067 to Beaverton.

The teachings of Honda have been discussed previously.

What is lacking from Honda is:

- The absorbent article having the various components of claims 44 and 45. It is noted that these components are understood to be a general description of a diaper.
- The paper web substrate of claim 51
- The nonwoven web substrate of claim 52.

Some of the teachings of Beaverton have been discussed previously. Beaverton generally discloses articles for odor removal that use odor removing nanoparticles as

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active agents. Beaverton describes articles that may be treated with odor removing nanoparticles which include paper materials, such as paper webs and nonwovens (see paragraph bridging pages 8 and 9, and claim 17), and diapers (see page 9).

It would be prime facie obvious to a person of ordinary skill in the art at the time of the invention to use the nanoparticles materials of Honda to make the articles of Beaverton. The motivation flows from the art recognizing that Honda's system is useful for the same purpose as that of Beaverton, namely making articles that remove undesirable odors. The artisan would thus enjoy a reasonable expectation of success.

Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honda in view of US 5,762,643 to Ray et al.

The teachings of Honda were discussed previously.

What is lacking is the teaching of a facemask.

Ray teaches that absorbent articles (abstract) are suitable for use as facemasks (figure 9 and descriptions thereof). However, such articles should have excellent odor removing ability (col. 5, lines 56 – 64).

It would be prime facie obvious to a person of ordinary skill in the art at the time of the invention to incorporate the materials and particles of Honda into the facemasks of Ray. The motivation comes from Ray, who teaches that an odor barrier is required. The particles of Honda are recognized as suitable for this purpose, since they remove odors. The artisan would therefore enjoy a reasonable expectation of success.

Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honda in view of US 2002/0006425 to Takaoa et al.

The teachings of Honda have been discussed previously.

What is lacking are alumina coated silica particles.

Takaoka teaches agents for removing malodors (abstract). Silica particles are recognized as useful for this purpose. One type of particle exemplified is SNOWTEX-AK (para. 105), which is recognized to be a trade name for alumina coated silica particles (see page 6 of instant specification).

It would be prime facie obvious to a person of ordinary skill in the art at the time of the invention to use alumina coated silica. The motivation flows from it being recognized in the art for the same purpose as the silica of Honda. See MPEP 2144.06. The artisan would therefore enjoy a reasonable expectation of success.

Conclusion

No claims are allowed.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric E. Silverman, PhD whose telephone number is 571 272 5549. The examiner can normally be reached on Monday to Friday 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571 272 8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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